



**CAMOSUN COLLEGE**  
**School of Access**  
***Academic and Career Foundations Department***

***MATH 022 Fundamental Mathematics 2***

**COURSE OUTLINE**

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***The Approved Course Description is available on the College website***  
[http://camosun.ca/learn/programs/academic-upgrading/what-youll-learn/upgrading.html#tabs-fundamental\\_a](http://camosun.ca/learn/programs/academic-upgrading/what-youll-learn/upgrading.html#tabs-fundamental_a)

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**1. Instructor Information**

- (a) Instructor: Aubrey Bebar
- (b) Office hours: Mon/Wed 11:15-12pm or by appointment
- (c) Location: Belmont Secondary School
- (d) E-mail: [bebara@camosun.ca](mailto:bebara@camosun.ca)
- (e) Course: 2018W MATH 022 S14

**2. Intended Learning Outcomes**

Complete ABE Fundamental Mathematics learning outcomes at ABE Articulation Handbook website [http://www2.gov.bc.ca/assets/gov/education/post-secondary-education/adult-education/2016-17\\_abe\\_guide.pdf](http://www2.gov.bc.ca/assets/gov/education/post-secondary-education/adult-education/2016-17_abe_guide.pdf)

On completion of the course, students will be able to...

- Use math vocabulary related to multiplication, perimeter, place value, estimating, ordering, adding, and subtracting whole numbers to 1,000,000.
- Identify place value and compare the magnitude of whole numbers.
- Round whole numbers to a given place.
- Add whole numbers with and without carrying.
- Subtract whole numbers with and without borrowing.
- Estimate sums and differences.
- Memorize the multiplication facts and multiply two whole numbers to 10 x 10.
- Write numbers as multiplication or repeated addition.
- Use addition or subtraction to solve multi-step application problems.
- Use multiplication to solve one-step application problems.
- Add and subtract time measurements, and convert between 12 and 24-hour notation.
- Calculate the perimeter of squares and rectangles.
- Work independently on the materials provided, and ask for help when needed.
- Use strategies to organize work and notes, and to manage time and math anxiety.

### 3. Required Materials

(a) textbook: *Adult Literacy Fundamental Mathematics Book Two*

#### Supplementary Materials

(b) three-ring binder, lined paper, graph paper

(c) pencils, eraser, ruler, highlighter, file cards

### 4. Course Instructions and Content

- (a) for each topic of the book listed below, study the explanations and examples, then work through and check your answers to as many exercise problems as you need to fully understand
- (b) ask for help when you have difficulties, or when you don't understand something
- (c) complete the Self-Tests for each topic and check your answers, then to prepare for the Unit Test complete the Review problems at the end of each unit
- (d) after clearing up any problems and correcting your errors, ask your instructor for authorization to write the Unit Test
- (e) review your test results with the instructor, and proceed to the next unit if you score 75% or better, or rewrite the test if you score less than 75%
- (f) calculators may not be used on tests, unless approved by the instructor

The course completion time will vary for each student, depending on a number of factors, including your current level of math skills, motivation, learning rate, and how much time you have to study math, either at the college or at home. Students generally need to spend 5–15 hours of study time per week to complete each math course within a reasonable amount of time.

| unit | topic       | MATH 022 course content – Book Two    | date |
|------|-------------|---------------------------------------|------|
| 1    |             | <b>Number Sense</b>                   |      |
|      | A           | Emotions and Learning                 |      |
|      | B           | Place Value                           |      |
|      | C           | Expanded Form                         |      |
|      | D           | Ordering Numerals                     |      |
|      | E           | Rounding Numbers                      |      |
|      |             | Unit 1 Review                         |      |
|      |             | Unit 1 Test                           |      |
| 2    |             | <b>Addition</b>                       |      |
|      | A           | Addition                              |      |
|      | B           | Addition with Carrying                |      |
|      | C           | Estimating Answers in Addition        |      |
|      |             | Unit 2 Review                         |      |
|      |             | Unit 2 Test                           |      |
| 3    |             | <b>Subtraction</b>                    |      |
|      | A           | Subtraction                           |      |
|      | B           | Subtraction of Larger Numbers         |      |
|      | C           | Renaming                              |      |
|      | D           | Subtraction with Borrowing            |      |
|      | E           | Estimating Answers in Subtraction     |      |
|      | F           | Problem Solving                       |      |
|      |             | Unit 3 Review                         |      |
|      | Unit 3 Test |                                       |      |
| 4    |             | <b>Multiplication</b>                 |      |
|      | A           | Introduction and Multiplication Facts |      |
|      | B           | Multiplying by 10, 100 and 1000       |      |
|      | C           | Word Problems                         |      |
|      |             | Unit 4 Review                         |      |
|      |             | Unit 4 Test                           |      |

| unit | topic | MATH 022 course content – Book Two         | date |
|------|-------|--------------------------------------------|------|
| 5    |       | <b>Making Change, Time &amp; Perimeter</b> |      |
|      | A     | Counting to Make Change                    |      |
|      | B     | Making Change                              |      |
|      | C     | Telling Time                               |      |
|      | D     | Adding Units of Time                       |      |
|      | E     | Perimeter                                  |      |
|      |       | Unit 5 Review                              |      |
|      |       | Unit 5 Test                                |      |

## 5. Basis of Student Assessment (Weighting)

The MATH 022 course grade is the average of all unit Final Test scores.

*Note:* Students with a record of poor attendance OR poor progress may be restricted from re-registering in Academic and Career Foundations Department courses.

## 6. Grading System

|    |         |    |        |    |             |
|----|---------|----|--------|----|-------------|
| A+ | 90–100% | B+ | 77–79% | C+ | 65–69%      |
| A  | 85–89%  | B  | 73–76% | C  | 60–64%      |
| A– | 80–84%  | B– | 70–72% | IP | in progress |

## 7. Learning Support and Services for Students

### ACADEMIC UPGRADING HELP CENTRE (CBA 109)

<http://camosun.ca/services/help-centres/math.html>

Help with coursework, reference & learning materials library, computers & printers, quiet testing & study areas

There are many other Camosun services available to help you succeed in and out of the classroom, including education planning, learning and personal support, campus life, work and housing, and getting around. This information is available at Registration or the College web site

<http://camosun.ca/services/>

## 8. College Policies

### ACADEMIC PROGRESS

The purpose of this policy is to enhance a learner's likelihood of success, and to encourage the learner to use College resources effectively.

<http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf>

### GRADING

The purpose of this policy is to ensure that grading and promotion are consistent and fair.

<http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf>

### STUDENT CONDUCT

The purpose of this policy is to provide clear expectations of appropriate academic and non-academic student conduct, and to establish processes for resolution of conduct issues or the imposition of sanctions for inappropriate conduct.

<http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf>